

## Dewey-Burdock Injection Well Permits

U.S. EPA Region 8  
Dewey-Burdock-class-III and class-V injection-well-  
draft-area-permits

Ex. 6 Personal Privacy (PP)

All of the aquifers in this proposal are presently being used for potable water by local residents, thus no exemption to the safe drinking water act of 1974 should be allowed. Both domestic and agriculture wells are in use. The NRC has prohibited the in-situ mining operation in this area until the 7600 plus abandoned bore holes are properly sealed. Geologically this is part of the Black hills uplift area, which is still rising, causing the rock to be highly fractured and constantly changing. Both of these conditions allow flow between all area Aquifers. This will make containment of mining and waste fluids impractical or improbable. Aquifer flow data as presented is inconsistent. In the mining application a flow rate of feet per year is cited, yet in the next paragraph a pump test showed a drop in a test well 1500 feet away in less than 5 minutes, pressurized injection would certainly move faster than pump suction head values. USGS Aquifer data shows tritium levels which would infer high flow rates from the known recharge sources. This was assumed to be caused by an unknown recharge source. TVA driller notes (Initially suppressed by Powertech) show that at least one bore hole went into an underground cave. This could be due to the Jewel Cave and/or Wind Cave structures extending under this area. USGS Aquifer data also concludes that flow rates through such structures is similar to surface flows in the area. This could easily explain the deviation between well data and tritium data without the need to identify an inferred new recharge source. I am concerned that this project has a high probability for rendering my water unusable forever in the next few years. I do not understand how radioactive waste is acceptable for injection into an actively used Aquifer which sits above another Aquifer which is also actively used. Present Ion exchange technology will not remove organified heavy metals, including uranium. Disposal of this waste fluid should require permitting for a class 1 well and continuous independent monitoring of the waste. Since no mining operations are occurring, no need is shown for disposal wells at this time. This area is also seismically active, with known faults in close proximity. Given the known occurrences of induced seismicity from injection well operations, containment of hazardous materials cannot be guaranteed. Will the agency granting these exceptions be responsible for mitigating any damages caused by this permit? Will a bond be required sufficient to provide water to all affected residents and to cover any damages like those seen in Oklahoma. Who will be responsible for the cost of testing present domestic wells, to obtain a true water quality baseline? I understand the concept of putting a few rural residents at risk for the perceived benefit of a larger population base. However you must accept that agricultural products grown on soil you allowed to be contaminated, with water you allowed to be polluted will end up in your grocery market shelves. It's called karma.

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